IAEA-IMIC 2016: Ethics: Case in Point

Andrew Ross MD, FRCP
President, Canadian Association of Nuclear Medicine
Dalhousie University, Halifax, Nova Scotia, Canada
Ethics Definition

- values relating to human conduct with respect to rightness and wrongness of actions and goodness and badness of motives and ends of such actions
- concept dealing with ways of making life better contributing to a civilized society built on a platform of our beliefs and values
- represents an aptitude to change ourselves into something better
History Medical Ethics

- Hippocrates (460–370 BC. Hippocratic oath continuously rewritten to suit the values of changing times

- 18th century, medical ethics a more self-conscious entity

- Thomas Percival, who wrote about medical jurisprudence, introduced the term ‘Medical Ethics'

- 1990s and early into the new millennium, clinical ethics has developed into a major academic and teaching discipline with universities
Fundamental Principles of Medical Ethics

**Autonomy**: independence, freedom of choice. Vital role in decision-making while discussing treatment and giving consent

**Dignity**: protected; respected constituting basic right

**Integrity**: adherence to moral and ethical principles maintaining a sound, undeterred and honest stature

**Susceptibility**: feeling unsafe and unguarded; helpless and vulnerable
Case Studies

- Specific issues related to medical imaging with reference to cardiac
- No "correct" answer
- Consider various factors
- Meant as a thought stimulating exercise on things we don’t routinely consciously consider in daily practice
Case 1

35 YO M prechemotherapy baseline Wallmo handed in with ejection fraction calculated at 36%

Technical issues
Options

• Provide the ejection fraction and a full report

• Give statement that imaging is suboptimal and give a full report

• Describe a technically unsatisfactory exam that should be repeated
Considerations

• Autonomy: patient needs to understand the implications

• Integrity: referring physician needs to be able to trust your judgment as well as the quality of your work

• Susceptibility: patient trust that you as the expert do what is correct
Suboptimal Images

- Reporting of suboptimal images can have the effect of providing dis-service to the patient
- Nondiagnostic scans should be identified early, so that alternative tests can be considered
- Enforcing strict quality control regimes is crucial to nuclear medicine practice
- Reinforced authority of medical physicists (or delegate) to refuse scanning of patients on equipment that has failed quality control
Case 2

42 yo M with exertional CP hypertension and hyperlipidemia

Last case of day Friday PM
Your Plan

• Report and head home to the family for dinner

• Call the referring or family physician to provide an urgent report

• Consider calling the patient directly
Considerations

- High risk scan

- Integrity call you have identified a high-risk patient who could have face severe adverse consequences if an event happens

- Susceptibility: The patient has trusted you to do what is right further Health and has no control over consequences
Communication of serious results Factors at play:

- Is the patient an inpatient or outpatient?
- How abnormal is the result?
- Is the referring provider from within or outside the institution where the study is being read?
- Results should be communicated verbally if the patient is an inpatient to assist in timely hospital disposition.
- Significantly abnormal result, the referring provider should be verbally informed regardless of whether inpatient or outpatient.
- Consider informing patient and have return to hospital or seek urgent evaluation.
Case 3

- A physician who sends many cases submits the following requisition:

- 25 year old female with atypical chest pain but high anxiety about having a heart attack wants a cardiac cath to make sure she is ok

- He is asking for an exercise MIBI
Your Response?

- Just perform the test
- Refused to test
- Have a discussion with the referring clinician and try to achieve a workable solution
Considerations

- The pretest likelihood of finding significant disease is negligible
- A false positive result is more likely
- Integrity; performing a test with radiation involved in a young female likely outweighs any benefit from the test
- Autonomy: The patient likely requires an understanding of the issues
Inappropriate referral

- Inappropriate referrals may sometimes be accepted by nuclear medicine gatekeepers.
- Should the interpreting physician get personally involved in the decision-making process between the ordering provider and patient when it comes to choosing the right stress test?
- Utility and challenge of prescreening ordered stress tests prior to patient arrival.
- Choosing a suitable test from many possible options may be tough for referring providers who may not be imaging experts.
- Responsibility of the interpreting physician to reduce inappropriately tests.
- Interpreting physicians are faced with ethical and real world logistical challenges, do not have the luxury of a detailed history.
Referring clinician calls as he is taking patient to cath the next day because of the severe Left main disease described by your colleague in the report (colleague away)
Your action

- Do nothing and let it go
- May be a case of wrong patient/wrong report
- Need to ensure referring clinician knows
- Integrity
- Autonomy
- Susceptibility
Case 5

Technologist brings image of a wall motion trying to acquire
Actions

• Issue a report discussing ‘technical issues’ that require a repeat

• Discuss issues with patient about wrong tracer and arrange a repeat
Considerations

• Autonomy: patient needs to be made aware of the issue and allowed to participate in dealing with the issue in an informed manner

• Integrity: you are ultimately the Final say on quality on exams and reports
Radiopharmaceutical QA or misadministration

- hold back from releasing any radiopharmaceutical for human use that has not passed quality control checks
- incident reporting system which can deal with issues such as maladministration or misadministration
Other Ethical Considerations

- Consent
- Radiation dose
- Queue jumping
- Accessability
- Affordability
Thank you! You are Invited!

EANM-Barcelona 2016
Convention Center
October 16\textsuperscript{th}: 10:00-11:00 AM
Level P1 / Hall 131/132

EANM-Barcelona 2016
Barcelona Princess Hotel
October 16\textsuperscript{th}: 5:00-7:00 PM
Room ESTRALLA DEL MAR

Canadian Association of Nuclear Medicine
Association canadienne de médecine nucléaire
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Collegial pressure and patient-centered shared-decision making: A case-based ethics discussion
Renee P. Bullock-Palmer, MD, FACC, FASNC, FASE,a Andrew M. Freeman, MD,b Andrew Kontak, MD,c Leslee J. Shaw, PhD,d,e Neal W. Dickert, MD, PhD,d,e Milena Henzllova, MD,f Jamshid Shirani, MD,g Sharmila Dorbala, MBBS,h Vasken Dilsizian, MD,i and Andrew J. Einstein, MD, PhD
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How to approach an inappropriately ordered myocardial perfusion stress study: A case-based ethics discussion
Ajay V. Srivastava, MD,a Andrew Kontak, MD,b Leslee J. Shaw, PhD,c,d Neal W. Dickert Jr., MD, PhD,c,e,f Vasken Dilsizian, MD,g
Sharmila Dorbala, MBBS,h Jamshid Shirani, MD,i and
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Responsibility for follow-up of abnormal findings in myocardial perfusion imaging: A case-based ethics discussion
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